

## ABSTRACT OF THE DISCLOSURE

An image processing device that reduces the memory size of image data inputted by scanner, digital camera or the like or sent in via communication means like the Internet and which outputs a clear enlarged image. First, for reduction of the memory size of image data, low component extracting means extracts the low frequency components of image data, and the relation information between high components and the low frequency components is obtained and encoded. To output the enlarged image clearly, Enlarged Frequency estimating means estimates the frequency components required for enlargement of an image by edge extraction and nonlinear interpolation method. Furthermore, image enlarging means estimates the enlarged image by Wavelet transform.